STATE OF MICHIGAN
DEPARTMENT OF COMMUNITY HEALTH
LANSING

JENNIFER M. GRANHOLM
GOVERNOR

JANET OLSZEWSKI
DIRECTOR

October 22, 2004

Subject: Influenza-Associated Pediatric Mortality (Children < 18 years of age)

Dear Colleague:

During the 2003-04 flu season, over 140 influenza-associated pediatric deaths were identified throughout the United States. Surveillance and investigation efforts in Michigan during the last influenza season linked 1 death in a previously healthy child to influenza.

The Centers for Disease Control and Prevention (CDC) has asked that we collect information on any pediatric death associated with influenza infection. Children less than the age of 18 who have not had a period of recovery between the onset of illness and death should be reported to the Michigan Department of Community Health.

To further determine the incidence of influenza-associated pediatric mortality occurring in the United States, we ask that you please **immediately** report the following:

A) Death in patients less than 18 years of age with laboratory-confirmed* influenza infection

OR

B) Unexplained de ath with evidence of an infectious process in patients less than 18 years of age

Please call or fax information to: Infectious Diseases Epidemiology Section: (517) 335-8165 (517) 335-8263 fax
After regular hours: (517) 335-9030

Information to include:

- Clinical summary with history of illness
- Laboratory results, including documentation of influenza virus infection
- Influenza vaccination status
- Autopsy report if available
- Travel history

Thank you for your assistance in this active surveillance effort.

Sincerely,

Corinne Miller, DDS, PhD
Bureau of Epidemiology Director

Frances Pouch Downes, DrPH
Bureau of Laboratories Administrator

Attachment: Specimen Collection Guidelines for the Diagnosis of Influenza

*Notes: Laboratory-confirmed influenza = positive influenza rapid antigen test OR positive direct or indirect fluorescence assay (DFA/IFA) OR viral culture positive for influenza OR positive reverse-transcriptase polymerase chain reaction (RT-PCR) OR four-fold rise in influenza hemagglutination inhibition antibody titer in paired acute and convalescent sera

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Influenza-Associated Deaths Children < 18 years of age
Specimen Collection Guidelines for the Diagnosis of Influenza (Revised 10/22/04)

All specimens must be pre-arranged with the Infectious Diseases Epidemiology Section prior to submission. Please call the Infectious Diseases Epidemiology Section at (517) 335-8165.

Living Patients
Optimal Specimen

- Nasopharyngeal swab and a separate oropharyngeal swab for viral culture collected as early as possible in the patient's illness.
- If any respiratory specimens (pleural fluid, bronchoalveolar lavage, etc.) available (including swabs preserved in viral transport media) or CSF are available, please forward for testing by PCR. **Sputum is not an acceptable specimen.**

Deceased Patients
Optimal Specimen

- Nasopharyngeal swab, tracheal, or bronchoalveolar swab preserved in viral transport media for viral culture collected as soon as possible after patient's death
- If any respiratory specimens are available from upper airway, (pleural fluid, bronchoalveolar lavage, etc. including swabs preserved in viral transport media), or CSF please forward for testing by PCR

Alternate Specimens

- Respiratory tract tissue for viral culture (in viral transport media)
- Frozen respiratory tract tissue for viral culture

Additional Specimens

- Paraffin-embedded and/or formalin-fixed tissue from the upper airway (trachea, larynx, large bronchi/central lung) and lung.
- Paraffin-embedded and/or formalin-fixed tissue of the heart, brain/meninges and all major organs. Organs showing any histopathology are a priority.

All specimens should be directed to MDCH-Bureau of Laboratories:

Address: 3350 North Martin Luther King Jr. Blvd
Lansing, MI 48909

Telephone: (517) 335-8067

- All specimens should be kept at 2-8º C (for up to 48 hours) until received at MDCH. Specimens can be stored at –70 ºC and transported on dry ice if storage or transit time will be prolonged.
- Further specifics on the collection and transport of specimens can be obtained from the MDCH Laboratory Services Guide on line at www.Michigan.gov/mdchlab.
- If viral culture specimens are routinely sent to a reference laboratory, we ask that specimens be split and a portion sent to MDCH for testing, so that typing as well as further characterization by CDC can be completed, if cultures are positive.

MDCH will perform respiratory pathogen panel testing of non-tissue respiratory specimens only. All other testing will be forwarded to CDC.